

Application No. 09/593,591  
Amendment dated May 18, 2007  
Reply to Office Action of February 12, 2007

### REMARKS

Applicant amended independent claims 1, 85, 163, 203, 223, and 263 to further define Applicant's claimed invention.

In the Office Action, the Examiner rejected claims 1, 2, 4, 5, 7-20, 22-30, 32-42, 85, 86, 88, 89, 91-129, 148-152, 158-164, 166, 168-182, 203, 204, 206, 208-224, 226, 228-242, 263, 264, 266, and 268-282 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Applicant amended independent claims 1, 85, 163, 203, 223, and 263 to delete the language rejected by the Examiner. It is submitted that the rejection of the claims under 35 U.S.C. § 112, first paragraph, is now moot.

The Examiner rejected claims 1, 2, 4, 5, 7-20, 22, 25, 30, 32-35, 85, 86, 88, 89, 91-106, 109, 114-119, 127-129, 148, 158, 163, 164, 171, 174, 175, 179, 180, 203, 204, 206, 208-211, 213-215, 219, 220, 223, 224, 226, 228-231, 233-235, 239, 240, 263, 264, 266, 268-271, 273-275, 279, and 280 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,277,149 to Boyle et al. ("Boyle") in view of U.S. Patent No. 5,865,845 to Thalgott ("Thalgott"); rejected claims 26-29, 110-113, 149-152, 155-157, 159-162, 172, 177, 178, 182, 212, 217, 218, 222, 232, 237, 238, 242, 272, 277, 278, and 282 under 35 U.S.C. § 103(a) as being unpatentable over Boyle and Thalgott as applied in the previous rejection, further in view of U.S. Patent No. 5,397,364 to Kozak et al. ("Kozak"); rejected claims 36-42, 120-126, 166, 168-170, 173, 181, 206, 221, 241, and 281 under 35 U.S.C. § 103(a) as being unpatentable over Boyle in view of Thalgott as applied in the rejection of claim 1 above, and further in view of the suggestions of Boyle; and rejected claims 23, 24, 207, 108, 176, 196, 216, 236, 256, and 276 under 35 U.S.C. § 103(a) as being unpatentable over Boyle in view of U.S. Patent No. 5,669,909 to Zdeblick et al. ("Zdeblick").

Applicant amended independent claims 1, 85, 163, 203, 223, and 263 to recite "a majority of said opening being between said leading end of said body and a plane perpendicular to and bisecting the length of said body along the mid-longitudinal axis."

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Boyle teaches an implant having an opening (26) between the leading and the trailing ends. (See Boyle, FIGS. 10, 11, 12.) In Boyle, a plane perpendicular to and bisecting the length of the implant along the mid-longitudinal axis would pass through the opening (26) such that the area of the opening between the bisecting plane and the leading end of the implant would be equal to the area of the opening between the bisecting plane and the trailing end of the implant. In Thalgott, a majority of the opening is located between the trailing end of the implant and a plane perpendicular to and bisecting the length of the implant along mid-longitudinal axis. (See Thalgott, FIGS. 2, 6, and 8). Neither Boyle nor Thalgott, alone or when properly combined, teach or suggest an implant having "a majority of said opening being between said leading end of said body and a plane perpendicular to and bisecting the length of said body along the mid-longitudinal axis" as recited in independent claims 1, 85, 163, 203, 223, and 263.

Several advantages are offered by a bone ring implant having an opening that is coincident with the medullary canal, a majority of said opening being between said leading end of said body and a plane perpendicular to and bisecting the length of said body along the mid-longitudinal axis in accordance with the claimed invention. For example, such structure permits keeping the trailing end of the bone ring relatively intact and only cutting the straight portions of the leading end and exterior sides to form the implant. Such a configuration permits better utilization of the bone ring by leaving a significant portion of the bone ring intact proximate the trailing end of the implant. (See Specification, page 8, lines 5-17; page 9, line 17 to page 10, line 4; and Figs. 2A, 2B, and 10.)

Applicant submits that the rejection of independent claims 1, 85, 163, 203, 223, and 263 under 35 U.S.C. § 103(a) over Boyle in view of Thalgott has been overcome. Applicant submits that the rejection of claims 2, 4, 5, 7-20, 22, 25-30, 32-42, 86, 88, 89, 91-106, 109-129, 148-152, 155-162, 164, 166, 168-175, 177-182, 204, 206, 208-212, 213-215, 217-222, 224, 226, 228-235, 237-242, 264, 266, 268-275, and 277-282 is rendered moot at least because these claims depend from an allowable independent claim, or claims dependent therefrom.

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Applicant submits that independent claims 1, 85, 163, 203, 223, and 263 are patentable and that dependent claims 2, 4, 5, 7-20, 22-30, 32-42, 86, 88, 89, 91-129, 148-152, 155-162, 164, 166, 168-182, 196, 204, 206-222, 224, 226, 228-242, 256, 264, 266, and 268-282, dependent from one of independent claims 1, 85, 163, 203, 223 and 263, or claims dependent therefrom, are patentable at least due to their dependency from an allowable independent claim.

Applicant respectfully requests that this Amendment under 37 C.F.R. § 1.116 be entered by the Examiner, placing claims 1, 2, 4, 5, 7-20, 22-30, 32-42, 85, 86, 88, 89, 91-129, 148-152, 155-164, 166, 168-182, 203, 204, 206, 208-224, 226, 228-242, 263, 264, 266, and 268-282 in condition for allowance.

In view of the foregoing remarks, Applicant submits that the claimed invention, as amended, is neither anticipated nor rendered obvious in view of the prior art references cited against this application. Applicant therefore requests the entry of this Amendment, the Examiner's reconsideration and reexamination of the application, and the timely allowance of the pending claims.

To the extent any extension of time under 37 C.F.R. § 1.136 is required to obtain entry of this reply, such extension is hereby respectfully requested. If there are any fees due under 37 C.F.R. §§ 1.16 or 1.17 which are not enclosed herewith, including any fees required for an extension of time under 37 C.F.R. § 1.136, please charge such fees to our Deposit Account No. 50-3726.

Respectfully submitted,

MARTIN & FERRARO, LLP

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By: 

Amedeo F. Ferraro

Registration No. 37,129

1557 Lake O'Pines Street, NE  
Hartville, Ohio 44632  
Telephone: (330) 877-0700  
Facsimile: (330) 877-2030